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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,351

09/22/2003

Norbertus Josephus Martinus Van De Nieuwelaar

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09/03/2004

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EXAMINER

MATHEWS, ALAN A

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,351

Applicant(s)

VAN DE NIEUWELAAR,
NORBERTUS JOSEPHUS M

Examiner

Alan A. Mathews

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8-26-04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 17 are rejected under 35 U.S.C. 102(b) as being anticipated by the European patent document EP 1041357 A1 (cited on Applicant's PTO-1449). Figure 4 discloses a substrate table WST at a measuring station, which would be a first station (see column 19, lines 39-57), and column 23, lines 35-53). Figure 2 discloses an exposure region 12, which would be a second station at which the substrate may be exposed. Figure 5 discloses a radiation system with an exposure station and a measuring station (see column 23, lines 35-55). Displacement measuring system includes interferometers 87X1, 87X2, 87Y1, 87Y2, 87Y3, 87Y4, and 87Y5 (see figure 7). A substrate transfer device includes 93A, 93B, 93C, and 93D. Figure 5 further discloses a projection system including elements 56, 60, 66, 68, and PL1 which projections a patterning beam from reticle R1 onto a substrate at the second station. With respect to claim 4, figure 5 discloses an alignment system 88A and 88B. Element 38 in figure 5 is a controller, which would have the necessary storage and would have a computer program to execute control of the lithographic projection apparatus. With respect to claims 14-17, it is noted that these are product-by-process claims.

3. Claims 1-3, 5-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwan et al (U. S. Patent Application Publication No. 2001/0004105 A1, cited in Applicant's PTO-1449).

Figures 1 and 2 disclose a substrate table WTb. The first station is element 30 at which measurement of the substrate may be performed (see page 5, paragraph # 86). The second station is element 20 at which the substrate may be exposed. Displacement measuring system includes interferometers IF in figure 1 and page 4, paragraph # 79, and also includes sensors 173, 174, 175, 183, 184, and 185 (see figure 9 and page 6, paragraph # 97). The table transfer device includes drive elements 120 and 130 (see page 6, paragraph #s 96-100). Figure 1 discloses a radiation system including LA and a support MT for supporting a patterning device MA. The projection system includes PL. With respect to claim 10, paragraph # 98 disclose software control, which means that the device would have memory or storage. With respect to claims 14-17, it is noted that these are product-by-process claims.

4. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (U. S. Patent No. 5,715,064). Lin discloses in figure 1 and column 3, lines 36-60, a measuring station 106 and an exposure station 108. Chucks 102 and 104 hold substrates and could be considered tables. Column 5, lines 10-23 disclose a displacement measuring system including interferometers. The projection system includes the lens 112 recited in column 3, line 51. With respect to claim 4, column 4, lines 14-50 disclose alignment. With respect to claims 14-17, it is noted that these are product-by-process claims.

Art Unit: 2851

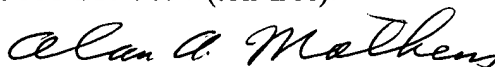
Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Tanaka is cited to show a measuring station and an exposure station. The patents on Applicant's PTO 1449 are cited for the same reasons Applicant cited them in his INFORMATION DISCLOSURE STATEMENT.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan A. Mathews
Primary Examiner
Art Unit 2851

AM